

Date: Thu, 4 Mar 93 04:30:02 PST
From: Packet-Radio Mailing List and Newsgroup <packet-radio@ucsd.edu>
Errors-To: Packet-Radio-Errors@UCSD.Edu
Reply-To: Packet-Radio@UCSD.Edu
Precedence: Bulk
Subject: Packet-Radio Digest V93 #58
To: packet-radio

Packet-Radio Digest Thu, 4 Mar 93 Volume 93 : Issue 58

Today's Topics:

Fo-20 TNC Settings? (4 msgs)
FT726R
Help on NOS mail to AX.25 (PLEASE!)
What happened to MIR?

Send Replies or notes for publication to: <Packet-Radio@UCSD.Edu>
Send subscription requests to: <Packet-Radio-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Packet-Radio Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/packet-radio".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 3 Mar 1993 15:57:52 GMT
From: usc!howland.reston.ans.net!gatech!kd4nc!ke4zv!gary@network.UCSD.EDU
Subject: Fo-20 TNC Settings?
To: packet-radio@ucsd.edu

In article <1180@arrl.org> lhurder@arrl.org (Luck Hurder KY1T) writes:
>In rec.radio.amateur.packet, gary@ke4zv.uucp (Gary Coffman) writes:
>>
>>Here piggy piggy piggy. This is a poor channel sharing strategy.
>>It maximizes *your* chances at the expense of everyone else. If
>>everyone does it, it minimizes everyone's chances of using the
>>satellite.

>>
>
>That would absolutely be true on terrestrial links, of course.
>
>But it's also equally UNtrue on the F020 satellite, Gary. In the
>whole Hartford area, I'm only likely to interfere with one fellow
>-- my boss -- and in that EXTREMELY unlikely event, one of us

>simply does the kind, Amateur Radio, thing - and moves to one of
>the other uplink channels.

Actually your signal is competing with everyone else in the satellite's footprint, not just the local area. That's a circle at least a couple hundred km in diameter. Just because you can't hear them doesn't mean the satellite couldn't have if not for your repeated transmissions. The satellite is a classic exposed terminal. It hears many competing stations from outside your local receiving range. The only way you know they are there is when the satellite fails to respond to your packets on a regular basis. You can all set piggy parameters and make all your lives miserable, you can play power wars and make some of your lives miserable, or you can set up as good as possible RF transceive conditions and friendly parameters and all enjoy the satellite.

>It's also untrue for another reason. F020 is so wonderfully unknown
>(in spite of our best efforts to create fun articles about it in QST!)
>that there's hardly anybody on it at any given time.

Now that's a better reason. If you have nearly exclusive channel availability to the satellite, you can use piggy parameters to compensate for a bad RF path without harming anyone else's access to the bird. Still, having a better RF path will increase your thruput, so it's worth worrying about in any case.

Don't take this as a personal flame. I just want to make people aware of the potential interference problems you run into with an exposed terminal like a satellite. If everyone uses piggy parameters, not many people can effectively use the satellite. If everyone makes nice, the satellite will be usable by more people.

We once had a terrestrial exposed terminal here in North Georgia. It was a mountaintop site on 145.01 MHz. There were times when it was held off from digipeating for as long as 15 minutes because of the excessive number of stations trying desparately to use it with short holdoff and fixed persistance. Very few of the users could hear each other direct so they were always complaining that the digi was broken. Well it wasn't. The site owner brought in an audio trace log and let it play during a packet meeting. It almost never stopped squalling during the two hour meeting. That certainly opened a few eyes. Using longer Dwain values, and ultimately using p-persistent exponential backoff at most user stations made the channel usable again until growth ultimately overwhelmed it totally. Finally, smaller coverage, backbone linked, sites have solved the problem for now.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

Date: 2 Mar 93 10:38:02 EDT
From: saimiri.prmate.wisc.edu!sdd.hp.com!ncr-sd!ncrcae!ncrhubb!ncrgw2!psinntp!
arrl.org@ames.arpa
Subject: Fo-20 TNC Settings?
To: packet-radio@ucsd.edu

In rec.radio.amateur.packet, tedwards@eng.umd.edu (Thomas Grant Edwards) writes:
>
>I can't even begin to imagine how ARSENE is going to work, given
>the trouble I've had getting onto F0-20. Perhaps it will be
>armed with something to automatically cut off someone who sends
>more than 1 packet every 30 seconds or something like that based on
>load.
>

Good point. Even so, I'm actively enjoying the prospect of setting up an ARSENE-gate for local HT-and-a-TNC users to thrash away on ARSENE. It should be quite a chuckle!

I don't believe for a second that your difficulties with F0 20 are related in any way to others using it at the same time. On the other hand, I don't know WHAT the problem is, except to say that it works well for me.

By the way, has anybody heard of a launch date for ARSENE?

N
| | Deputy Manager, Field Services, ARRL.
| |---| The ARRL Amateur Radio Emergency Service, the ARRL
| uck | urder National Traffic System, The Amateur Auxiliary to
-----| | the FCC's Field Operations Bureau, the ARRL
KY1T Field Organization and the ARRL Monitoring System.

lhurder@arrl.org Prodigy - MGTS39A, BIX - ARRL,
MCI Mail - RPALM, MCI Mail - "ARRL HQ", America On Line - "ARRL HQ"
Compuserve - 70007,3373 (ARRL HQ) -- Genie ARRL.HQ

Date: 2 Mar 93 10:24:57 EDT
From: mvb.saic.com!unogate!news.service.uci.edu!usc!elroy.jpl.nasa.gov!sdd.hp.com!
ncr-sd!ncrcae!ncrhubb!ncrgw2!psinntp!arrl.org@network.UCSD.EDU
Subject: Fo-20 TNC Settings?
To: packet-radio@ucsd.edu

In rec.radio.amateur.packet, gary@ke4zv.uucp (Gary Coffman) writes:

>
>Here piggy piggy piggy. This is a poor channel sharing strategy.
>It maximizes *your* chances at the expense of everyone else. If
>everyone does it, it minimizes everyone's chances of using the
>satellite.
>

That would absolutely be true on terrestrial links, of course.

But it's also equally UNtrue on the F020 satellite, Gary. In the whole Hartford area, I'm only likely to interfere with one fellow -- my boss -- and in that EXTREMELY unlikely event, one of us simply does the kind, Amateur Radio, thing - and moves to one of the other uplink channels.

It's also untrue for another reason. F020 is so wonderfully unknown (in spite of our best efforts to create fun articles about it in QST!) that there's hardly anybody on it at any given time.

Therefore, I stand by my assertion that cranking the FRack down to something otherwise-wierd like TWO is a logical thing to do.

Besides, it works fine. And impacts on nobody.

| | | Deputy Manager, Field Services, ARRL.
| |---| The ARRL Amateur Radio Emergency Service, the ARRL
| uck | urder National Traffic System, The Amateur Auxiliary to
-----| | the FCC's Field Operations Bureau, the ARRL
KY1T Field Organization and the ARRL Monitoring System.

lhurder@arrl.org Prodigy - MGTS39A, BIX - ARRL,
MCI Mail - RPALM, MCI Mail - "ARRL HQ", America On Line - "ARRL HQ"
Compuserve - 70007,3373 (ARRL HQ) -- Genie ARRL.HQ

Date: 4 Mar 1993 02:45:39 GMT

From: ucsd.edu!brian@network.UCSD.EDU
Subject: Fo-20 TNC Settings?
To: packet-radio@ucsd.edu

gary@ke4zv.UUCP (Gary Coffman) writes:
>We once had a terrestrial exposed terminal here in North Georgia.
>... The site owner brought
>in an audio trace log and let it play during a packet meeting. It
>almost never stopped squalling during the two hour meeting.

Think how much better that would have worked if it had been a "full duplex" packet repeater!

Digipeaters have to go away.

I've run FDX packet over the satellite; it's great!
- Brian

Date: 3 Mar 93 19:41:19 GMT
From: agate!howland.reston.ans.net!gatech!pitt.edu!dsinc!ub!
galileo.cc.rochester.edu!uhura.cc.rochester.edu!dnlg_ltd@ames.arpa
Subject: FT726R
To: packet-radio@ucsd.edu

We have a 6m module for this radio. We would like to get a 440-450 MHZ module if possible. We will consider any offer as well as an even swap.

Please reply to:
Dan (N2PRC) dnlg_ltd@uhura.cc.rochester.edu or
Brian (KB4JPO) bstp_ltd@uhura.cc.rochester.edu

Date: 3 Mar 93 19:29:30 MDT
From: swrinde!elroy.jpl.nasa.gov!sdd.hp.com!caen!hellgate.utah.edu!cc.usu.edu!
sltmw@network.UCSD.EDU
Subject: Help on NOS mail to AX.25 (PLEASE!)
To: packet-radio@ucsd.edu

In article <1993Mar1.120843.64646@cc.usu.edu>, I write:
> Well, this is a beaten to death problem, but I can't for the life of me get my
> WJ7J 1.07b, BBS to recieve and forward mail...Here are copies of my REWRITE,
> ALIAS, and FORWARD.BBS files
>

[misc. stuff deleted]

I figured out the problem, the ALIAS, and REWRITE files can only have one space between the commands....

--
-----The Ex-Royal Gigolo of the House of Norwedia-----
/ | "I drank WHAT?" -Socrates
\ uper |-|olmes | "I love the smell of Napalm in the morning" -Big Duke:
/ 'N7NKR' | Apocalypse Now

I'net: sltmw@cc.usu.edu sltmw@cache.declab.usu.edu Bitnet: sltmw@usu.bitnet

ghazexsrcwdceterfygtgyiy <-----sorry, just wiping the puke off my keyboard

Date: 3 Mar 93 09:32:38 EST
From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa
Subject: What happened to MIR?
To: packet-radio@ucsd.edu

I've had a TNC sitting on 145.550 MHz for several days now, and haven't heard a peep out of MIR. Since yesterday, there were a couple of nearly-overhead passes. Did they change frequency?

73, Fred, K4DII

fred-mckenzie@ksc.nasa.gov

Date: 3 Mar 93 20:20:17 GMT
From: ogicse!uwm.edu!zaphod.mps.ohio-state.edu!darwin.sura.net!mojo.eng.umd.edu!
tedwards@network.UCSD.EDU
To: packet-radio@ucsd.edu

References <1993Feb28.151214.11664@ke4zv.uucp>, <1mru1oINNh0m@mojo.eng.umd.edu>, <1993Mar3.162014.3557@ke4zv.uucp>
Subject : Re: Fo-20 TNC Settings?

In article <1993Mar3.162014.3557@ke4zv.uucp> gary@ke4zv.UUCP (Gary Coffman) writes:
>In article <1mru1oINNh0m@mojo.eng.umd.edu> tedwards@eng.umd.edu (Thomas Grant Edwards) writes:

>>I can't even begin to imagine how ARSENE is going to work, given
>>the trouble I've had getting onto F0-20. Perhaps it will be
>>armed with something to automatically cut off someone who sends

>>more than 1 packet every 30 seconds or something like that based on
>>load.

>Some AMSAT thinkers have suggested using master stations and polling
>in a quasi-token ring configuration in order to manage users on
>ARSENE. That has a chance of working if everyone cooperates. But it
>only takes one or two loud piggies to spoil it for everyone.

I think the biggest problem with any kind of a token ring situation is that stations will be added/dropped from the satellite footprint all this time, and if we too wait long for a station to pick up its token, and that station is no longer in range, things will slow down rapidly. Still, if the max wait time is small (say 1-2 seconds) this shouldn't be too bad. Could you mention some details about how this might work?

Another approach I thought up was having the digipeater sat send out packets which said how many users were on, and that you would have a smart terminal program which would grab these and set the TNC parameters to appropriate values. If we wanted to be a little elitist about it, the terminal program would tack on a special token to each uplinked packet which indicated that the special terminal program was in use, or maybe not only that but that it also recognized properly how many users were on, and that packets without those tokens would be dropped, hopefully keeping users without the adaptive terminal program from accessing the sat. Of course, this would be annoying. Then again, it would also be annoying to have a sat digipeater which is uselessly jammed by a million users who keep sending packet after packet without waiting. Anyway, since ARSENE isn't smart enough, we'll save this method for later sat digis.

-Thomas N3HAU

Date: Wed, 3 Mar 1993 16:20:14 GMT
From: usc!howland.reston.ans.net!gatech!kd4nc!ke4zv!gary@network.UCSD.EDU
To: packet-radio@ucsd.edu

References <1169@arrl.org>, <1993Feb28.151214.11664@ke4zv.uucp>,
<1mru1oINNhbM@mojo.eng.umd.edu>
Reply-To : gary@ke4zv.UUCP (Gary Coffman)
Subject : Re: Fo-20 TNC Settings?

In article <1mru1oINNhbM@mojo.eng.umd.edu> tedwards@eng.umd.edu (Thomas Grant Edwards) writes:

>In article <1993Feb28.151214.11664@ke4zv.uucp> gary@ke4zv.UUCP (Gary Coffman)

writes:

>>A kinder gentler packeteer will set his frack so that it's longer
>>than the longest possible roundtrip acknowledge time. Otherwise
>>he can clobber others with great regularity. A truly considerate
>>operator will use P-persistent backoff and spend his time trying
>>to improve his RF capabilities, both up and down so he'll have
>>fewer garbage frames.

>

>I can't even begin to imagine how ARSENE is going to work, given
>the trouble I've had getting onto F0-20. Perhaps it will be
>armed with something to automatically cut off someone who sends
>more than 1 packet every 30 seconds or something like that based on
>load.

Unfortunately it's not that smart Thomas. That doesn't really solve the piggy problem anyway since stations will continue to send their repetitive packets effectively jamming the channel for others. It's what the satellite's receiver hears, not what it's digits decode that determines the usability of the channel.

Some AMSAT thinkers have suggested using master stations and polling in a quasi-token ring configuration in order to manage users on ARSENE. That has a chance of working if everyone cooperates. But it only takes one or two loud piggies to spoil it for everyone.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

End of Packet-Radio Digest V93 #58
